

CLAIMS

I claim:

- 1 1. A method for making combustible products from recyclable materials comprising:
2 blending feedstock, wherein said feedstock is selected substantially from the
3 group consisting of thermoplastic material, cellulosic fibers and combinations thereof;
4 inputting said blended feedstock into a grinder for the purpose of reducing the size
5 of said blended feedstock; and
6 compressing and extruding said reduced blended feedstock through a cuber so as
7 to create combustible products.
- 1 2. The method of Claim 1 wherein said grinder operates at a torque of between about
2 18,000 and about 20,000 ft-lbs of torque per motor shaft.
- 1 3. The method of Claim 1 wherein said grinder operates at a speed of between about
2 75 to about 80 rpms.
- 1 4. The method of Claim 1 wherein said thermoplastic material is selected from the
2 group consisting of polyethylene, polypropylene, polystyrene, acrylonitrile-butadiene-
3 styrene, acetal copolymer, acetal homopolymer, acrylic, polybutylene and combinations
4 thereof.
- 1 5. The method of Claim 1 wherein said feedstock is selected from the group
2 consisting of byproducts from the production of disposable diapers, byproducts from the
3 production of sanitary pads, byproducts from the production of adhesive liners,
4 byproducts from the production of hospital gowns and combinations thereof.
- 1 6. The method of Claim 1 wherein said feedstock is selected from the group
2 consisting of waste from the production of disposable diapers, waste from the production

- 3 of sanitary pads, waste from the production of adhesive liners, waste from the production
- 4 of hospital gowns and combinations thereof.

- 1 7. A method for preparing combustible materials from thermoplastic material and
2 cellulosic fibers comprising:
3 selecting feedstock selected substantially from the group consisting of
4 thermoplastic material, cellulosic fibers and combinations thereof
5 feeding said feedstock through a size reduction apparatus, wherein said size
6 reduction apparatus operates at a torque of between about 18,000 and about 20,000 ft-lbs
7 of torque per motor shaft; and
8 feeding said reduced feedstock through a cuber, including forcing said feedstock
9 through die holes to form combustible products.
- 1 8. The method of Claim 7 wherein said size reduction apparatus operates at a speed
2 of between about 75 and about 80 rpms.
- 1 9. The method of Claim 7 wherein said thermoplastic material is selected from the
2 group consisting of polyethylene, polypropylene, polystyrene, acrylonitrile-butadiene-
3 styrene, acetal copolymer, acetal homopolymer, acrylic, polybutylene and combinations
4 thereof.
- 1 10. The method of Claim 7 wherein said feedstock is selected from the group
2 consisting of byproducts from the production of disposable diapers, byproducts from the
3 production of sanitary pads, byproducts from the production of adhesive liners,
4 byproducts from the production of hospital gowns and combinations thereof.
- 1 11. The method of Claim 7 wherein said feedstock is selected from the group
2 consisting of waste from the production of disposable diapers, waste from the production
3 of sanitary pads, waste from the production of adhesive liners, waste from the production
4 of hospital gowns and combinations thereof.

- 1 12. A method for manufacturing a combustible product comprising:
2 supplying feedstock into a grinder, wherein said feedstock is selected substantially
3 from the group consisting of thermoplastic material, cellulosic fibers and combinations
4 thereof;
5 grinding said feedstock at a torque of between about 18,000 and about 20,000 ft-
6 lbs of torque per motor shaft; and
7 feeding said ground feedstock through a cuber to form combustible products.
- 1 13. The method of Claim 12 wherein said grinder operates at a speed of between
2 about 75 and about 80 rpms.
- 1 14. The method of Claim 12 wherein said thermoplastic material is selected from the
2 group consisting of polyethylene, polypropylene, polystyrene, acrylonitrile-butadiene-
3 styrene, acetal copolymer, acetal homopolymer, acrylic, polybutylene and combinations
4 thereof.
- 1 15. The method of Claim 12 wherein said feedstock is selected from the group
2 consisting of byproducts from the production of disposable diapers, byproducts from the
3 production of sanitary pads, byproducts from the production of adhesive liners,
4 byproducts from the production of hospital gowns and combinations thereof.
- 1 16. The method of Claim 12 wherein said feedstock is selected from the group
2 consisting of waste from the production of disposable diapers, waste from the production
3 of sanitary pads, waste from the production of adhesive liners, waste from the production
4 of hospital gowns and combinations thereof.

- 1 17. A method for manufacturing a combustible product comprising:
2 supplying feedstock into a grinder, wherein said feedstock is selected substantially
3 from the group consisting of thermoplastic material, cellulosic fibers and combinations
4 thereof;
5 grinding said feedstock at a torque of between about 18,000 and about 20,000 ft-
6 lbs of torque per motor shaft; and
7 feeding said ground feedstock through a cuber to form combustible products.
- 1 18. The method of Claim 17 wherein said grinder operates at a speed of between
2 about 75 and about 80 rpms.
- 1 19. The method of Claim 17 wherein said thermoplastic material is selected from the
2 group consisting of polyethylene, polypropylene, polystyrene, acrylonitrile-butadiene-
3 styrene, acetal copolymer, acetal homopolymer, acrylic, polybutylene and combinations
4 thereof.
- 1 20. The method of Claim 17 wherein said feedstock is selected from the group
2 consisting of byproducts from the production of disposable diapers, byproducts from the
3 production of sanitary pads, byproducts from the production of adhesive liners,
4 byproducts from the production of hospital gowns and combinations thereof.
- 1 21. The method of Claim 17 wherein said feedstock is selected from the group
2 consisting of waste from the production of disposable diapers, waste from the production
3 of sanitary pads, waste from the production of adhesive liners, waste from the production
4 of hospital gowns and combinations thereof.

1 22. A system for manufacturing a combustible product comprising:
2 a grinder for grinding feedstock, wherein said feedstock is selected substantially
3 from the group consisting of thermoplastic material, cellulosic fibers and combinations
4 thereof and said grinder operates at a torque of between about 18,000 and about 20,000 ft-
5 lbs of torque per motor shaft;
6 a cuber for shaping said ground feedstock into predetermined shapes; and
7 a method of feeding said feedstock through said grinder and said cuber to form
8 combustible products.

1 23. The system of Claim 22 wherein said grinder operates at a speed of between about
2 75 and about 80 rpms.

1 24. The system of Claim 22 wherein said thermoplastic material is selected from the
2 group consisting of polyethylene, polypropylene, polystyrene, acrylonitrile-butadiene-
3 styrene, acetal copolymer, acetal homopolymer, acrylic, polybutylene and combinations
4 thereof.

1 25. The system of Claim 22 wherein said feedstock is selected from the group
2 consisting of byproducts from the production of disposable diapers, byproducts from the
3 production of sanitary pads, byproducts from the production of adhesive liners,
4 byproducts from the production of hospital gowns and combinations thereof.

1 26. The system of Claim 22 wherein said feedstock is selected from the group
2 consisting of waste from the production of disposable diapers, waste from the production
3 of sanitary pads, waste from the production of adhesive liners, waste from the production
4 of hospital gowns and combinations thereof.

- 1 27. A combustible product, wherein said combustible product has been made by the
2 process of:
3 supplying feedstock into a grinder, wherein said feedstock is selected substantially
4 from the group consisting of thermoplastic material, cellulosic fibers and combinations
5 thereof;
6 grinding said feedstock at a torque of between about 18,000 and about 20,000 ft-
7 lbs of torque per motor shaft; and
8 feeding said ground feedstock through a cuber to form combustible products.
- 1 28. The product of Claim 27 wherein said feedstock is ground at between about 75
2 and about 80 rpms.
- 1 29. The product of Claim 27 wherein the thermoplastic material is selected from the
2 group consisting of polyethylene, polypropylene, polystyrene, acrylonitrile-butadiene-
3 styrene, acetal copolymer, acetal homopolymer, acrylic, polybutylene and combinations
4 thereof.

1 30. A method for manufacturing a combustible product comprising:
2 supplying feedstock into a grinder, wherein said feedstock is selected substantially
3 from the group consisting of thermoplastic material, cellulosic fibers and combinations
4 thereof;
5 grinding said feedstock at a torque of between about 18,000 and about 20,000 ft-
6 lbs of torque per motor shaft;
7 feeding said ground feedstock through a cuber to form combustible products.
8 monitoring the operational characteristics of said grinder and said cuber using a
9 software application, wherein said characteristics can be monitored and controlled using
10 said software.

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1 31. The method of Claim 30 wherein said operational characteristics are selected from
2 the group consisting of amperage draw of the grinder, the amperage draw of the cuber,
3 the speed of the grinder the heat generated in the grinder, the heat generated in the cuber,
4 the speed of the grinder; the speed of the cuber, the pressure required to perform the
5 cubing operation.

6 32. The product of Claim 30 wherein said feedstock is ground at between about 75
7 and about 80 rpms.

1 33. The product of Claim 30 wherein the thermoplastic material is selected from the
2 group consisting of polyethylene, polypropylene, polystyrene, acrylonitrile-butadiene-
3 styrene, acetal copolymer, acetal homopolymer, acrylic, polybutylene and combinations
4 thereof.